

# Lessons from the Ashes: Improving Transportation Safety Through Accident Investigation



**RTCA Webinar Series**

Robert Sumwalt

July 15, 2020





# The Board



Michael Graham



Bruce Landsberg



Robert Sumwalt



Jennifer Homendy



Thomas Chapman



# NTSB Response Operations Center



# Situation Room





# Enroute



# Boots on the Ground

- Powerplants
- Structures
- Systems
- Operations
- Human performance
- Survival factors
- Airworthiness
- ATC
- Meteorology
- Recorders
- Transportation  
Disaster  
Assistance







# Drones



# Data Accuracy



Left tire impact < 1" variance from ground measurement

Prop slash marks less than 0.1" variance

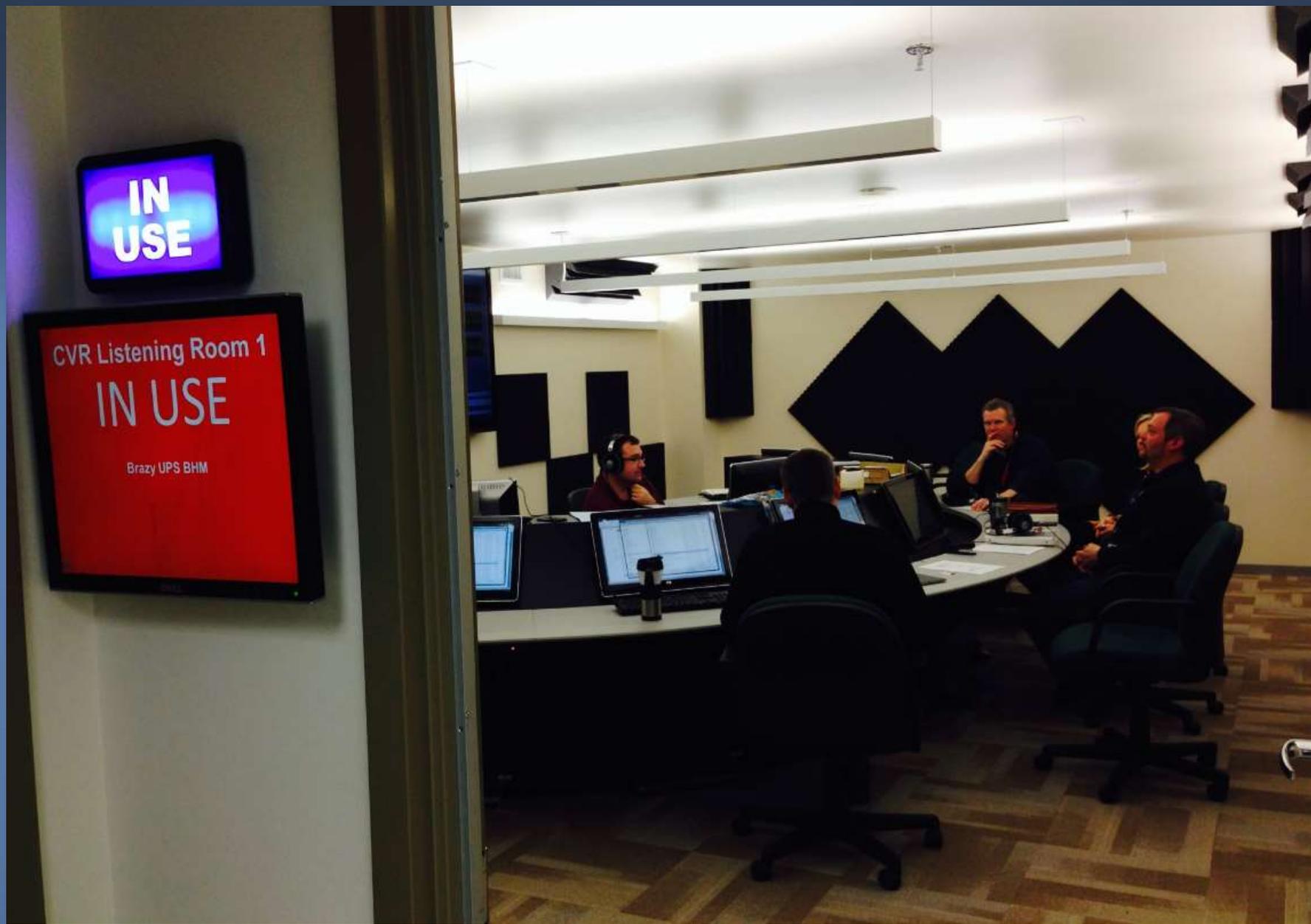


Wing from runway edge – ground measurement and ortho equal at 83'4"







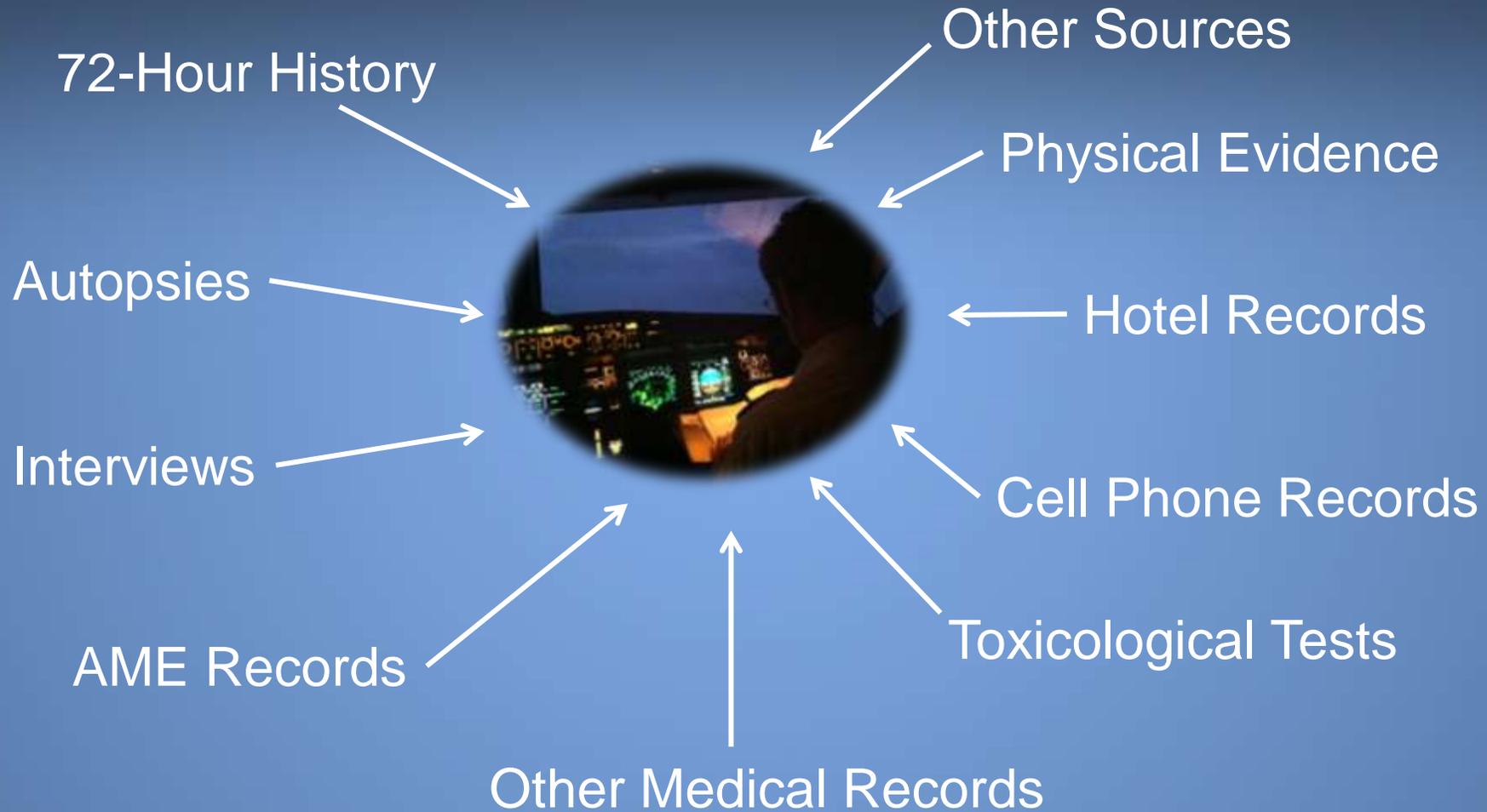




Human factors is a multidisciplinary science that examines the relationship between humans and the systems with which they interact, including...

Ergonomics  
Engineering  
Psychosocial interactions  
Decision-making  
Fatigue  
TEM  
Physiology  
Psychology  
Human-centered design  
Information processing  
Biomechanics  
Medicine  
Study of organizational issues  
National cultural influences  
Anthropometrics  
Resilience engineering  
Automation management  
Communications  
CRM

# Potential Sources of Information



Helicopter Air Ambulance Collision with Terrain  
Survival Flight Inc.  
Bell 407 Helicopter, N191SF  
near Zaleski, Ohio  
January 29, 2019

**DRAFT**



Accident Report  
NTSB/AAR-20/01  
PB2020-101001



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